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10/763,214	01/26/2004	Timothy L. Kohler	03630.000178.1	6558

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EXAMINER

HANG, VU B

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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05/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,214	Applicant(s) KOHLE ET AL.	
	Examiner Vu B. Hang	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13-18, 20, 39 and 58 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-18, 20, 39 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This office action is responsive to the Request for Continued Examination filed on 01/25/2010.
- The amendments received on 01/25/2010 have been entered and made of record.
- Claims 1-9, 13-18, 20, 39 and 58 are pending in the current application.

Response to Arguments

1. Applicant's arguments filed on 01/25/2010, with respect to the amended independent claims and the previously cited prior art references, have been fully considered and are persuasive. Therefore, the previous rejections of Claims 1-7, 13-18, 20, 39 and 58 have been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Schneider et al. (US Patent 5,625,758), Peterson et al. (US Patent 5,402,361), and Steams et al. (US Patent 5,699,450).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows:

4. **Claim 39** defines a computer program containing computer-executable process steps for arranging print data according to a layout (see applicant's drawing Fig.2 (16,45), and applicant's

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specification pages 8-9 and pages 14-16). The recited computer program/negotiation controller is with functional descriptive material. While functional descriptive material may be claimed as a statutory product (i.e., a “manufacture”) when embodied on a tangible computer readable medium, a “computer program” per se does not fall within any of the four statutory classes of 35 U.S.C. 101. Furthermore, a “computer program” is not a “machine”, “composition of matter” or a “manufacture” because these statutory classes relate to structural entities and can be grouped as “product” claims in order to contrast with “process” claims (1D. Chisum, Patents §1.02 (1994)). Machines, manufactures and compositions of matter are embodied by physical structures or material, whereas “computer programs” are not “machines” because they have no physical structures, and do not perform any useful, concrete and tangible results. Likewise, “computer programs” are not compositions of matter because they are not matter, but rather a form of conceptual idea. Finally, “computer programs” are not “manufactures” because all traditional definitions of a manufacture have required some form of physical structure, which the claimed “computer program” does not have.

A “manufacture” is defined as “the production of articles for use from raw materials or prepared materials by giving to these materials new forms, qualities, properties or combinations, whether by hand-labor or by machinery.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8, USPQ 131, 133 (1931)).

5. Therefore, a computer program is considered non-statutory because it is a form of conceptual idea, in the absence of any physical structure or tangible material, that does not fall within any of the four statutory classes of 35 U.S.C. §101.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7, 13-18, 20, 39 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. (US Patent 5,625,758) in view of Peterson et al. (US Patent 5,402,361), and in further view of Steams et al. (US Patent 5,699,450).

8. Regarding **Claim 1**, Schneider discloses a method for arranging print data according to a layout of the print data (see Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The text, images and control marks are placed on the recording medium in accordance to the presetting data obtained from the preliminary printing stage.], wherein the print data includes color patches printed by a color printer onto the recording medium (see Fig.1 (1,2,3), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The register marks printed on the recording medium for controlling color measurements are considered color patches.], comprising: determining, via communication with the printer, the printing capabilities of the printer (see Fig.1 (1,2,3,4), Col.4, Line 47-53 and Col.6, Line 13-20), wherein the printing capabilities includes a designation of a valid area on the recording medium on which the printer can print (see Fig.3, Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31); determining the layout of the print data based on compatible capabilities of the printer and the processing capabilities of a system in the printer responsible for measuring the color patches (see Fig.1 (1,2,3,4), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The position coordinates and dimensions information of the control marks are sent to printing press

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for processing by a system in the printing press responsible for measuring the control marks.], wherein the layout is characterized by an area on the recording medium that is common between the valid area designated by the capabilities of the printer and the system in the printer responsible for measuring the color patches (see Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31); and arranging the print data for printout by the printer in accordance to the determined layout (see Fig.3, Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31).

9. Schneider fails to disclose wherein the recording medium is processed by a target device comprising a color measuring device different from the printer; and the step for obtaining the processing capabilities of the target device from the target device, wherein the processing capabilities includes a designation of a printable area on the recording medium, the minimum distance of separation between the color patches and a minimum size for the color patches. Schneider, however, teaches communicating and obtaining processing capabilities of a remote printing press (see Fig.1 (1,2,3,4), Col.4, Line 47-53 and Col.6, Line 13-21), wherein the printing press includes a system for measuring and regulating printed color patches (see Fig.3 and Col.6, Line 22-31). Schneider further teaches providing the exact position coordinates and dimensions for the color patches to be measured (see Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31). Peterson discloses a method for communicating between a host computer and a remote color measuring device (see Fig.13 (850,860,802,210), Col.11, Line 21-30 and Col.29, Line 20-33), wherein the host computer obtains processing capability information from the color measuring device (see Fig.15, Col.30, Line 2-12, Col.34, Line 29-54 and Col.37, Line 7-23)

[Note: The information obtained by the host computer, including the identification information

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and the color measurement information from the densitometer, would be considered "obtaining processing capability information".], and wherein the processing capability information include a designation of a printable area on the recording medium (see Fig.2, Fig.3, Col.19, Line 64 – Col.20, Line 12, Col.32, Line 18-29 and Col.37, Line 24-29). [Note: The color measurement performed by the densitometer on a particular color patch or an image element and the communication of the results back to the host computer would include "providing a designation of a printable area on the recording medium."] Stearns teaches providing a minimum sizing for color patches to be measured, arranging the color patches in predetermined orientation and spacing them apart within focal precision of the sensor for the purpose of sensing and measuring the color patches on a recording medium (see Fig.3 and Col.8, Line 26-51).

10. Schneider, Peterson and Stearns are combinable because they are from the same field of endeavor, namely color image data processing methods. At the time of the invention, it would have been obvious for one skilled in the art to include to Schneider's method the steps for obtaining the processing capabilities information of a remote target device that is different from the printer, wherein the processing capabilities includes a designation of a printable area on the recording medium. The motivation would be to ensure that the print data sent to the remote target device (color measuring device) is consistent with the layout requirements for the target device. This would avoid processing or measurements at unintended areas of the printed image. The processing capabilities information would ensure that the printed color patches would be measured by the color measuring device. It is further obvious for one skilled in the art to include to the processing capabilities information the minimum distance of separation between the color patches and a minimum size for the color patches. The motivation would be to ensure that the

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color patches will be measured by the color measuring devices. The color measuring device may only be capable of sensing or reading the color patches at certain areas or positions on the print medium.

11. Regarding **Claim 2**, Schneider further discloses the step of communicating with a printer so as to negotiate/determine a layout (see Fig.3, Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31).

12. Regarding **Claim 3**, Schneider, Paterson and Stearns teach the method as described in Claim 1, but they fail to expressly disclose the step of communicating with the target device so as to negotiate the layout. Schneider, however, teaches communicating and obtaining processing capabilities of a remote printing press (see Fig.1 (1,2,3,4), Col.4, Line 47-53 and Col.6, Line 13-21), wherein the printing press includes a system for measuring and regulating printed color patches (see Fig.3 and Col.6, Line 22-31). Schneider further teaches providing the exact position coordinates and dimensions for the color patches to be measured (see Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31). At the time of the invention, it would have been obvious for one skilled in the art to include the step for communicating with the remote target device (or a printing press with a color measuring device) so as to negotiate a layout. The motivation would be to calculate the print data layout in accordance with the target device's print data layout requirements.

13. Regarding **Claim 4**, Schneider further discloses the step of communicating the layout of the print data to the printer and configuring the printer in accordance with the communicated layout (see Fig.1 (1,2,3,4), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31).

14. Regarding **Claim 5**, Schneider further teaches wherein the layout is communicated to the printer in a print job sent to the printer (see Fig.1 (1,2,3,4), Fig.3 and Col.4, Line 3-27).

15. Regarding **Claim 6**, the rationale provided for the rejection of Claim 3 is incorporated herein.

16. Regarding **Claim 7**, Schneider further teaches wherein the printing capabilities are determined through communication with the printer (see Fig.1 (1,2,3,4), Col.4, Line 47-53 and Col.6, Line 13-20).

17. Regarding **Claim 13**, the rationale provided for the rejection of Claim 1 is incorporated herein.

18. Regarding **Claim 14**, the rationale provided for the rejection of Claim 1 is incorporated herein.

19. Regarding **Claim 15**, the rationale provided for the rejection of Claim 1 is incorporated herein.

20. Regarding **Claim 16**, the rationale provided for the rejection of Claim 1 is incorporated herein.

21. Regarding **Claim 17**, Schneider further teaches wherein the print data includes color patches for performing color calibration on the color printer (see Fig.1 (1,2,3), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The register marks printed on the recording medium for controlling color measurements are considered color patches.]

22. Regarding **Claim 18**, Schneider, Paterson and Stearns teach the method as described in Claim 1, but they fail to expressly disclose wherein the target device can be selected from a stamp reader, a bar code reader, an automatic scoring device, an automatic binding device and an

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automatic stamping device. Schneider, however, teaches that a remote target device could be a folding device (see Fig.1 (1,2,3,4), Col.4, Line 41-47 and Col.5, Line 15-18), a cutting device (see Col.5, Line 15-18), a printing press with a color measuring device (see Fig.1 (1,2,3,4), Col.5, Line 54 - Col.6, Line 6 and Col.7, Line 60-67), a turn-over device (see Fig.1 (1,2,3,4), Col.5, Line 9-18) or printing press with a finishing device (see Fig.1 (1,2,3,4), Col.5, Line 9-18).

Schneider further teaches that the print data communication process can be applied to any areas of the printing process which can operate independently from the printing press (see Col.3, Line 44-47). At the time of the invention, it would have been obvious for one skilled in the art to apply the print data communication process with a specific post-print processing or finishing device. The motivation would be to perform specific post-print processing on the recording medium, such as applying a specific cutting, binding, stitching or finishing on the printed recording medium.

23. Regarding **Claim 20**, Schneider discloses an apparatus for arranging print data according to a layout of the print data (see Fig.1, Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The text, images and control marks are placed on the recording medium in accordance to the presetting data obtained from the preliminary printing stage.], wherein the print data includes color patches and is printed by a color printer onto a recording medium (see Fig.1 (1,2,3), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The register marks printed on the recording medium for controlling color measurements are considered color patches.], comprising: a first interface to a printer (see Fig.1 (1,2,3,4,20,21,22) and Col.4, Line 3-27); a second interface to a target device (see Fig.1 (1,2,3,4,20,21,22) and Col.4, Line 3-27) [Note: Each printing press 1,2 and 3 of Figure 1, including its additional

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finishing device, is considered a target device.]; a memory including a region for storing a computer-executable program (see Fig.1 (1,2,3,4), Col.4, Line 3-27, Col.5, Line 54-64 and Col.6, Line 14-20) [Note: Host computer 4 of Figure 1 performs the communication procedures with the remote printing presses.]; and a processor for executing computer-executable programs (see Fig.1 (1,2,3,4), Col.4, Line 3-27, Col.5, Line 54-64 and Col.6, Line 14-20) [Note: It is inherent that Host computer 4 of Figure 1 includes a memory/processor for performing the communication process with the remote printing presses.], wherein the executable programs includes the steps for determining the layout of the print data based on compatible capabilities of the printer and the processing capabilities of a system in the printer responsible for measuring the color patches (see Fig.1 (1,2,3,4), Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31) [Note: The position coordinates and dimensions information of the control marks are sent to printing press for processing by a system in the printing press responsible for measuring the control marks.], wherein the layout is characterized by an area on the recording medium that is common between the valid area designated by the capabilities of the printer and the system in the printer responsible for measuring the color patches (see Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31); and arranging the print data for printout by the printer in accordance to the determined layout (see Fig.3, Fig.4, Col.5, Line 34-39, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31).

24. Snedier fails to disclose wherein the recording medium is processed by a target device comprising a color measuring device different from the printer, and wherein the computer-executable process steps include obtaining the processing capabilities of the target device from the target device, wherein the processing capabilities includes a designation of a printable area

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on the recording medium, the minimum distance of separation between the color patches and a minimum size for the color patches. Schneider, however, teaches communicating and obtaining processing capabilities of a remote printing press (see Fig.1 (1,2,3,4), Col.4, Line 47-53 and Col.6, Line 13-21), wherein the printing press includes a system for measuring and regulating printed color patches (see Fig.3 and Col.6, Line 22-31). Schneider further teaches providing the exact position coordinates and dimensions for the color patches to be measured (see Fig.3, Col.5, Line 54 – Col.6, Line 6 and Col.6, Line 21-31). Peterson discloses an apparatus for communicating between a host computer and a remote color measuring device (see Fig.13 (850,860,802,210), Col.11, Line 21-30 and Col.29, Line 20-33), wherein the host computer obtains processing capability information from the color measuring device (see Fig.15, Col.30, Line 2-12, Col.34, Line 29-54 and Col.37, Line 7-23) [Note: The information obtained by the host computer, including the identification information and the color measurement information from the densitometer, would be considered “obtaining processing capability information”.], and wherein the processing capability information include a designation of a printable area on the recording medium (see Fig.2, Fig.3, Col.19, Line 64 – Col.20, Line 12, Col.32, Line 18-29 and Col.37, Line 24-29). [Note: The color measurement performed by the densitometer on a particular color patch or an image element and the communication of the results back to the host computer would include "providing a designation of a printable area on the recording medium."]

Stearns teaches providing a minimum sizing for color patches to be measured, arranging the color patches in predetermined orientation and spacing them apart within focal precision of the sensor for the purpose of sensing and measuring the color patches on a recording medium (see Fig.3 and Col.8, Line 26-51).

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25. Schneider, Peterson and Stearns are combinable because they are from the same field of endeavor, namely color image data processing apparatuses. At the time of the invention, it would have been obvious for one skilled in the art to include to the computer-executable program the steps for obtaining the processing capabilities information of a remote target device that is different from the printer, wherein the processing capabilities includes a designation of a printable area on the recording medium. The motivation would be to ensure that the print data sent to the remote target device (color measuring device) is consistent with the layout requirements for the target device. This would avoid processing or measurements at unintended areas of the printed image. The processing capabilities information would ensure that the printed color patches would be measured by the color measuring device. It is further obvious for one skilled in the art to include to the processing capabilities information the minimum distance of separation between the color patches and a minimum size for the color patches. The motivation would be to ensure that the color patches will be measured by the color measuring devices. The color measuring device may only be capable of sensing or reading the color patches at certain areas or positions on the print medium.

26. Regarding **Claim 39**, the rationale provided for the rejection of Claim 20 is incorporated herein.

27. Regarding **Claim 58**, the rationale provided for the rejection of Claim 20 is incorporated herein.

Conclusion

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28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571)272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.
29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vu B. Hang/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625